

PROPOSED CONSTRUCTION OF A SCIENCE LABORATORY BLOCK - PHASE 2

AT

**EMEREOKE 2
COMMUNITY IN EASTERN OBOLO L.G.A
AKWA IBOM STATE**

BILLS OF QUANTITIES



CLIENT:

BOPANE HCDT
45 AHOADA ST.
RUMUIBEKWE HOUSING ESTATE
OFF ABA ROAD, PH
RIVERS STATE



RC: AK 18989

CONSULTANT

MBINTEX KONSULT
5 MBAJA AVE. OKOROMBOKHO
Eastern Obolo, Akwa Ibom state



PREPARED BY:
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**NIGERIAN INSTITUTE OF QUANTITY SURVEYORS
The Professional Construction Cost Managers**

BILL NO. 1: PRELIMINARIES				
COST CENTRE	COMPONENTS	TIME RELATED CHARGES	FIXED CHARGES	TOTAL CHARGES
	BILL NO.1 PRELIMINARIES Part A: Project Particulars Name of the Project: Construction of Science Laboratory Nature of project: The project involves; construction of a Science laboratory Building, Site works/Infrastructures etc, from foundation to finishes and Hand over. This phase focuses on finishing and completion. Location of project: Emereoke 2 Duration of the Project: 6 months Client: Bopane HCDT Name of Contractor Drawings; Architechural and Mechanical Services Bills of Quantities: In accordance with BESMM4R Form of Contract: The Nigerian Construction Industry			
1.1B	Part B: Pricing Schedule			
1.1.1	EMPLOYER'S REQUIREMENT			
1.1.2.06	Control and Protection Multi-service gang- BOPANE Project Unit-12 Project Monitoring by other approved bodies	Wks		550,000.00
1.1.2.07	Design, Approvals and permit 2 Processing Fees: (a) Site Plan and Analysis (SPAR) (b) EIA Report 3 Others: Local Authority Approval/ Logistics Stakeholder engagement Logistics	Wks	Item Item	250,000.00 750,000.00
4	Commissioning Logistics			
	EMPLOYER'S REQUIREMENT TO COLLECTION			1,550,000.00

1.1.2	MAIN CONTRACTOR'S COST ITEM			
1.1.2.1	Management and Staff			
1.1.2.1.1	Project Specific Management and Staff		Item	
1.1.2.2	Site Establishment			
1.1.2.2.1	Site accommodation		Item	
1.1.2.2.2	Temporary works in connection with site establishment	2	Nr	
1.1.2.2.3	Furniture and Equipment		Item	
1.1.2.2.5	Consumables and services; Stationaries, Computer ink cartridges, Courier charges, postage, tea, coffee, First aid consumables, stationeries etc.	Wks		
1.1.2.2.6	Bought- in services			
1.1.2.2.7	Sundries; Main contractor's signboards, safety and information notice boards, fire points, Employer's composite signboards.		Item	
1.1.2.03	Temporary Services			
1.1.2.3.1	Temporary Water Supply		Item	
1.1.2.3.2	Temporary gas Supply	Wks		
1.1.2.3.3	Temporary electricity Supply		Item	
1.1.2.04	Security of Site			
1.1.2.4.1	Security Staff; security guards and Watchmen for 6months	2	Nr	
1.1.2.4.3	Hoarding, Fences and Gate		M	
	PAGE 2 MAIN CONTRACTOR COST ITEM TO COLLECTION			

1.1.2.05	Safety and Environmental Protection			
1.1.2.05.1	Community Relation and Engagement		Item	
	Safety Programme; Notices and information to neighbours; Community relations Safety audits, Staff safety training, Personal Protective equipment (PPE) for workers and multi-service gang, Fire points, Temporary fire alarms, Fire estinguishers, Nurse, Traffic Marshals, etc.		Item	
1.1.2.5.1				
1.1.2.5.2	Barriers and safety scaffolding; guardrails and edge protection, temporary Staircase balustrades,etc.		Item	
1.1.2.06	Control and Protection			
1	Survey, Inspections and Monitoring		Item	
2	Setting Out		Item	
3	Samples		Item	
1.1.2.08	Temporary Works			
	Access Scaffolding, Type---; Bringing to site, erecting and initial safety checks and including desmantling and removing from site		Nr	
1	site			
1.1.2.09	Site Records			
	Site Records; photography, Works Records.		Item	
1	Records.			
1.1.2.10	Completion and Post- completion Requirements			
1	Testing and Commissioning plan		Item	
2	Handover		Item	
3	Post- completion Services	Wks		
PAGE 3 TO COLLECTION				

1.1.2.11	Cleaning			
1	Site Tidy		Wks	
1.1.2.13	Sites Services			
1	Temporary Works			Item/Nr/M/ M2/M3
2	Multi-service gang- Administrator	Contract Project Architect Project Quantity Surveyor Project Engineer	Wks	
1.1.2.15	Transportation/Haulage Allow a provisional sum for transortation materials.			Item
	PAGE 4 TO COLLECTION			
	COLLECTION: PAGE 2 PAGE 3 PAGE 4			
	MAIN CONTRACTOR COST ITEM TO COLLECTION EMPLOYERS COST ITEM			
	PRELIMINARIES CARRIED TO MAIN SUMMARY			

BILL NO.2; SCIENCE LABORATORY BLOCK - PHASE 2

ITEM	DESCRIPTION	QTY	UNIT	RATE	AMOUNT
1.23	WINDOWS, SCREENS AND LIGHTS				
	The following aluminium window tower or approved equivalent; complete all necessary iron mongery, assembled and fixed to;including cutting and pinning lugs to concrete or block work opening; surrounding and bedding frame in cement mortar(1:4).				
1.23.1.1.1	Supply and fix in place Aluminium framed glass projected window fully glazed with 5mm thick sheet glass size: 600mm x 600mm high.	5	Nr		
1.23.1.1.1	Ditto; Projected Window size: 800mm x 2400mm high.	1	Nr		
1.23.1.1.1	Ditto; Projected Window size: 1200mm x 2400mm high.	29	Nr		
1.23.1.1.1	Ditto; Projected Window size: 800mm x 1200mm high.	11	Nr		
1.24	DOORS, SHUTTERS AND HATCHES				
	Supply and fix the following door of approved quality and design to suit size				
	Virony doors or equivalent; size:750mm x 2100mm high.				
1.24.2.1.1.1	high.	6	Nr		
1.24.2.1.1.1	Ditto; 900mm x 2100mm high.	17	Nr		
1.24.2.1.1.1	Steel Doors				
1.24.2.1.1.1	Approved Security door size:1600mm x 2100mm high.	1	Nr		
1.24.2.1.1.1	Steel fabricated Doors made of m.s Steel plate 1.8mm thick, size 1200mmx2100mm		Nr		
1.26	METAL WORK;BURGLARY PROOF				
	Supply and fix the following mild steel burglary proof panels made of Wrought iron Sq pipe for window Protector design, fixed to concrete work/block work with lugs, including making good surfaces disturbed and painting with 2 gloss paint to suit window openings.				
1.26.2.1.1.1		46	Nr		
	WINDOWS, DOORS AND METAL WORK TO SUMMARY				

1.32	FURNITURE , FITTINGS AND EQUIPMENT				
1.32.2.1.4	HANDRAILS Fabricate and fix approved iron handrails at the entrance door/ verander.		M		
1.32.2.1.4	EQUIPPING & FURNISHING Furnitures; Laboratory tables, Chairs and Cupboard	4	Sets		
1.32.2.1.4	Science Equipments and Reagents	4	Sets		
	FURNITURE , FITTINGS AND EQUIPMENT TO SUMMARY				
1.38	MECHANICAL SERVICES				
1.32.2.1.4	Sanitary Appliance and Fittings Hand wash basin, 450mm x 350mm c/w bottle trap tap and accessories, 'Twyford' or approved equivalent.	4	Nr		
1.32.2.1.4	Vitreous China or Tyford Water Closet complete with accessories, 'Twyford' or approved equivalent.	4	Nr		
1.32.2.1.4	Vitreous China urinal flush cistern with flush pipe C/w accessories, 'Twyford' or approved equivalent.	4	Nr		
1.32.2.1.4	Vitreous China toilet roll holder, 'Twyford' or approved equivalent.	4	Nr		
1.32.2.1.4	Float mirror, 600mm x 450mm x 5mm, 'Fikington' or equivalent.	2	Nr		
	Fixtures 9kg multi- purpose dry powder fire extinguisher; waterloo or equivalent.		Nr		
1.38.2	Terminal Equipment and Fittings: Fresh water distribution				
1.38.3.1.1	Pipe Work; Allow a provisional sum for all pipe work(PRP Pipes as specified in the Mechanical Engineering drawings) in connection with Plumbing work		Item		
	Builders Work Allow a provisional sum for builder works in connection with Mechanical Services.		Item		
	MECHANICAL SERVICES TO SUMMARY				

1.39	ELECTRICAL SERVICES			
1.39.1.1.1.1	Primary Equipment: Supply and install the following High equipment, System, high level in plant room Type: 200A Busbar chamber (Mem)	1	Nr	
	Electrical Control; 100A ELCB	1	Nr	
	100A 4-way TPN Distribution board	1	Nr	
	200A TP&N Gear Switch	1	Nr	
	Cut out fuse box	1	Nr	
	Neutral Link/Connector	1	Nr	
	300mm x 450mm board	1	Nr	
1.39.2.1.1.1	Terminal Equipment: Supply and install the following approved rated Lamps and other Fittings complete with accessories: Decorative wall bracket fitting	12	Nr	
	200W PoP flush Light mounted fittings	20	Nr	
	100 W Water tight security fittings	8	Nr	
1.39.3	Cable Contentment: 50mm diameter upvc cable duct-Kano or equal in blockwall chases, including cutting chases in block wall and making good. Ditto; buried in Ceiling	120	M	
		168	M	
1.39.4	Cable Contentment Fittings: Supply and fixed the following: Joint boxes, Connectors, bends,tees,sets,junctions, reducers, Fire barriers and the like. Extra over 50mm pipe ducts for 50mm elbows	95	Nr	
		80	Nr	
	Ditto; 25mm	100		
1.39.5	Cables 16mm ² single core pvc insulated copper conductor, drawn in upvc duct (measured). 10mm ² 1c pvc/pvc copper cable 4mm ² 1c pvc/pvc copper cable 2.5mm ² 1c pvc/pvc copper cable 1.5mm ² 1c pvc/pvc copper cable	100	M	
		100	M	
		100	M	
		500	M	
		1000	M	
	Electrical Service to Page collection.			

FLOOR, WALL, CEILING AND ROOF FINISHINGS					
	<u>Ground Floor : Floors</u>				
1.28.1.2.1.3	Screeds, beds and toppings 40mm thick, exceeding 600mm wide, level and to falls only =50 ⁰ from horizontal, backing and beddings 44mm thick in cement and sand mortar (1:5) laid on concrete bed (measured separately) to receive tiles.	487	M ²		
	Cement Backing; 5mm Cement Binder paste	487	M ²		
1.28.2.2.1.7	Floor Tiles: Finish to Floors; 400mm x 400mm x 8mm Vitrified tiles laid on floor, exceeding 600mm wide to approved pattern on cement and sand bed (measured separately); finished with straight butt joints and flush with pointing coloured cement grout .	487	M ²		
1.28.2.2.1.7	Ditto; Skirting 100mm high.	270	M		
	Cement Backing; 8mm Cement Binder paste	270	M		
1.28.7.2.1	<u>Walls</u> Finish to Walls; Cement and Sand (1:4) rendering 12mm thick, exceeding 600mm wide Externally and internally.	1091	M ²		
	<u>Window and Door Skirting/Design</u> Architrave Balustrade made of Cement and Sand mortar 1:4mix, include concrete work as required.	292	m		
1.28.7.2.1	Wall Tiles: Finish to Walls; 250mm x 400mm x 8mm Glazed Ceramic tiles laid on Walls, exceeding 600mm wide to approved pattern on cement and sand bed (measured separately); finished with straight butt joints and flush with pointing coloured cement grout .	60	M ²		
	Cement Backing; 5mm Cement Binder paste	60	M ²		
1.28.9.2.1	<u>Ceiling</u> Finish to ceilings,Suspended ceiling 600mm thick x 600mm wide as specified.	487	M ²		
	FINISHINGS TO SUMMARY				
	DECORATION; PAINTING Painting to general surfaces, exceeding 300mm girth,internal, patterned, one undercoat and two finishing coats of Peacock or other approved quality emulsion paint on wall Externally and internally.	1091	M ²		
	PAINTING CARRIED TO SUMMARY				
	COLLECTION:				
	FINISHINGS				
	DECORATION; PAINTING				
	INTERNAL FINISHES TO SUMMARY				

1.34	DRAINAGE BELOW GROUND				
1.34.7.1	Foul Drain: Inspection Chamber Construction of inspection chambers, size 450mm x 450mm x 600mm using 150mm thick solid sandcrete block and covered with precast reinforced concrete slab size 450mm x 450mm x 50mm	8	Nr		
1:34.8.2.3	Soak Away Pit (S.A.P) Soak Away Pits; internal size: 2950mm x 2600mm x 3000mm deep using 150 mm thick solid sandcrete block wall built honey comb with reinforced concrete columns and plaster internally with the bottom/base casted with plain concrete grade 30 as well as covered with reinforced concrete slab as per Engineer details.	1	nr		
1:34.10.2.3	Septic Tank (S.T) Septic Tank; internal size: 3000mm x 2600mm x 3200mm deep using 150 mm thick solid sandcrete block wall with reinforced concrete columns/ cross beams and plaster internally with the bottom/base casted with plain concrete grade 30, as well as covered with reinforced concrete slab as per Engineer details.	1	nr		
1.34.16	Allow for all pipe work in connection with drainage		Item		
	DRAINAGE CARRIED TO SUMMARY				

MAIN SUMMARY				
FACILITATING WORKS				
WINDOWS, DOORS AND METAL WORK				
INTERNAL FINISHES				
FITTINGS, FURNISHINGS AND EQUIPMENT				
SERVICES				
PREFABRICATED BUILDING AND BUILDING UNITS				
WORK TO EXISTING BUILDING				
DRAINAGE BELOW THE GROUND				
TOTAL				
SUB-TOTAL				
PROVISIONAL SUMS				
DEFINED PROVISIONAL SUM				
WORKS TO BE CARRIED OUT BY STATUTORY UNDERTAKERS				
SUB-TOTAL				
MAIN CONTRACTOR'S FIXED PRICE				
DIRECTOR'S ADJUSTMENT(+/-)				
SUB TOTAL				
DAY WORKS (PROVISIONAL)				
TOTAL TENDER PRICE(EXCLUSIVE OF VAT)				
ADD VAT				
CARRIED TO GENERAL SUMMARY				

GENERAL SUMMARY					
ITEM	DESCRIPTION	QTY	UNIT	AMOUNT	TOTAL
1	BILL NO. 1: PRELIMINARIES	1	Nr	-	-
2	BILL NO.2: MAIN BUILDING	1	Nr	-	-
	TOTAL				-
	ADD PROFIT AND OVERHEAD	20%			-
	TOTAL2				-
	ADD VAT				-
	GRAND TOTAL				-